

(19) World Intellectual Property
Organization
International Bureau



558095

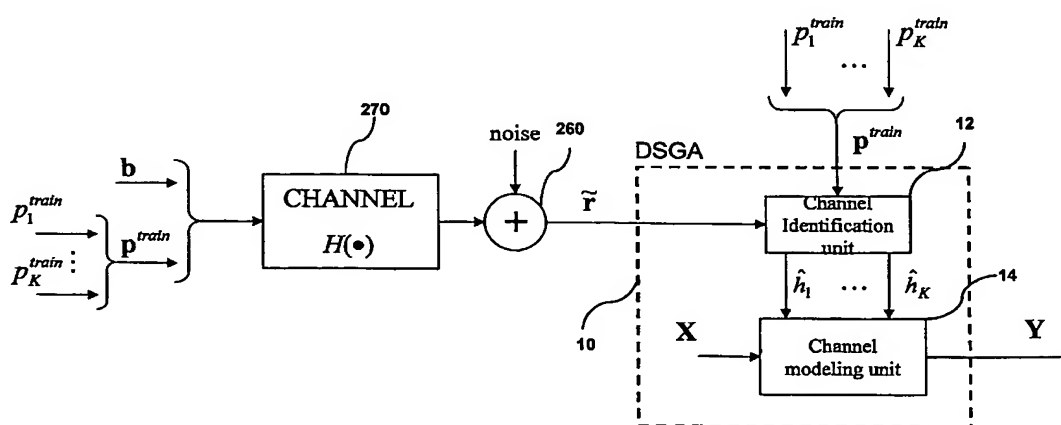
(43) International Publication Date
2 December 2004 (02.12.2004)

PCT

(10) International Publication Number
WO 2004/105264 A2

- (51) International Patent Classification⁷: **H04B 1/707** (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number:
PCT/CA2004/000757
- (22) International Filing Date: 21 May 2004 (21.05.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/472,789 23 May 2003 (23.05.2003) US
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- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MIXED DIRECT-INDIRECT ADAPTATION PROCEDURE APPLIED TO RECEIVER FILTER



(57) Abstract: An adaptive procedure that optimizes the parameters of a receiver filter such as a Multiuser Detection (MUD) applied to Direct-Sequence Code Division Multiple Access (DS-CDMA) is disclosed. This procedure takes into account the constraints imposed by the absence of training data sequences sent by the transmitter and required to adapt the filter parameters at the receiver. The adaptation consists in using two distinct data sequences transmitted through the same channel; one data sequence is transmitted as payload data and a second data sequence is transmitted as training data used to adapt the filter parameters at the receiver. Parameters of the receiver filter are adapted in presence of varying channels at the same time as the data information sequences are transmitted. The adaptation is realized following a mixed adaptation procedure based on a direct (without channel identification) and indirect (with channel identification) scheme. The invention is described for UMTS (Universal Mobile Telecommunications System) application in cellular communications system.